AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A ~~waveguide~~ device, comprising:

a waveguide core having a bottom surface and a top surface that defines an angle; ~~and~~

a cladding layer adjacent to the bottom surface, the cladding layer having a thickness equal to or greater than an evanescent tail of a mode to be transmitted along the waveguide ~~wave guide~~ core;

a detector layer; and

an attenuating layer coupled to the bottom surface of the waveguide core and positioned on top of the detector layer;

wherein the mode is transmitted along the waveguide core through the attenuating layer into the detector layer.

2. (Currently Amended) The ~~waveguide~~ device of claim 1, wherein the angle is at least equal to an angle of total internal reflection of the waveguide core.

3. (Currently Amended) The ~~waveguide~~ device of claim 1, wherein the waveguide core defines a beveled mirror.

4. (Currently Amended) The ~~waveguide~~ device of claim 1, ~~further comprising:~~ wherein the detector layer comprises a base of a phototransistor ~~having a base, wherein the waveguide core is coupled to the base of the phototransistor~~.

5. (Currently Amended) The ~~waveguide~~ device of claim 4, wherein the waveguide core defines a beveled mirror.

6. (Currently Amended) The ~~waveguide~~ device of claim 5, wherein the waveguide core is disposed over a substrate and the beveled mirror directs the mode, propagated through the waveguide core, through the detector layer into the substrate.

7. (Currently Amended) The ~~waveguide~~ device of claim 1, ~~further comprising:~~ wherein the detector layer comprises an intrinsic layer region of a photodiode having an n-type region~~, an intrinsic layer region,~~ and a p-type region~~,~~ ~~wherein the waveguide core is coupled to the intrinsic layer region of the photodiode~~.

8. (Currently Amended) The ~~waveguide~~ device of claim 7, wherein the waveguide core defines a beveled mirror.

9. (Currently Amended) The ~~waveguide~~ device of claim 8, wherein the waveguide core is disposed over a substrate and the beveled mirror directs ~~a~~ the mode, propagated through the waveguide core, through the detector layer into the substrate.

Claims 10 to 30 (Cancelled)

31. (New) A device, comprising:

a waveguide core having a bottom surface;

a cladding layer adjacent to the bottom surface, the cladding layer having a thickness equal to or greater than an evanescent tail of a mode to be transmitted along the waveguide core;

a detector layer; and

an attenuating layer coupled to the bottom surface of the waveguide core and positioned on top of the detector layer.

32. (New) The device of claim 31, wherein the waveguide core has a top surface that defines an angle, the angle being at least equal to an angle of total internal reflection of the waveguide core.

33. (New) The device of claim 31, wherein the waveguide core defines a beveled mirror.

34. (New) The device of claim 31, wherein the detector layer comprises a base of a phototransistor.

35. (New) The device of claim 34, wherein the waveguide core defines a beveled mirror.

36. (New) The device of claim 35, wherein the waveguide core is disposed over a substrate and the beveled mirror directs the mode propagated through the waveguide core and through the detector layer into the substrate.

37. (New) The device of claim 31, wherein the detector layer comprises an intrinsic layer region of a photodiode having an n-type region-and a p-type region.

38. (New) The device of claim 37, wherein the waveguide core defines a beveled mirror.

39. (New) The device of claim 38, wherein the waveguide core is disposed over a substrate and the beveled mirror directs the mode propagated through the waveguide core and through the detector layer into the substrate.

40. (New) A device, comprising:

a waveguide core having a bottom surface;

a cladding layer adjacent to the bottom surface;

a detector layer; and

an attenuating layer coupled to the bottom surface of the waveguide core and positioned on top of the detector layer;

wherein the mode is transmitted along the waveguide core through the attenuating layer into the detector layer.

41. (New) The device of claim 40, wherein the waveguide core has a top surface that defines an angle, the angle being at least equal to an angle of total internal reflection of the waveguide core.

42. (New) The device of claim 40, wherein the waveguide core defines a beveled mirror.

43. (New) The device of claim 40, wherein the detector layer comprises a base of a phototransistor.

44. (New) The device of claim 43, wherein the waveguide core defines a beveled mirror.

45. (New) The device of claim 44, wherein the waveguide core is disposed over a substrate and the beveled mirror directs a mode propagated through the waveguide core through the detector layer into the substrate.

46. (New) The device of claim 40, wherein the detector layer comprises an intrinsic layer region of a photodiode having an n-type region-and a p-type region.

47. (New) The device of claim 46, wherein the waveguide core defines a beveled mirror.

48. (New) The device of claim 47, wherein the waveguide core is disposed over a substrate and the beveled mirror directs a mode, propagated through the waveguide core, through the detector layer into the substrate.

49. (New) The device of claim 40, wherein the cladding layer has a thickness equal to or greater than an evanescent tail of a mode to be transmitted along the waveguide core.

50. (New) The device of claim 49, wherein the mode is transmitted along the waveguide core through the attenuating layer into the detector layer.